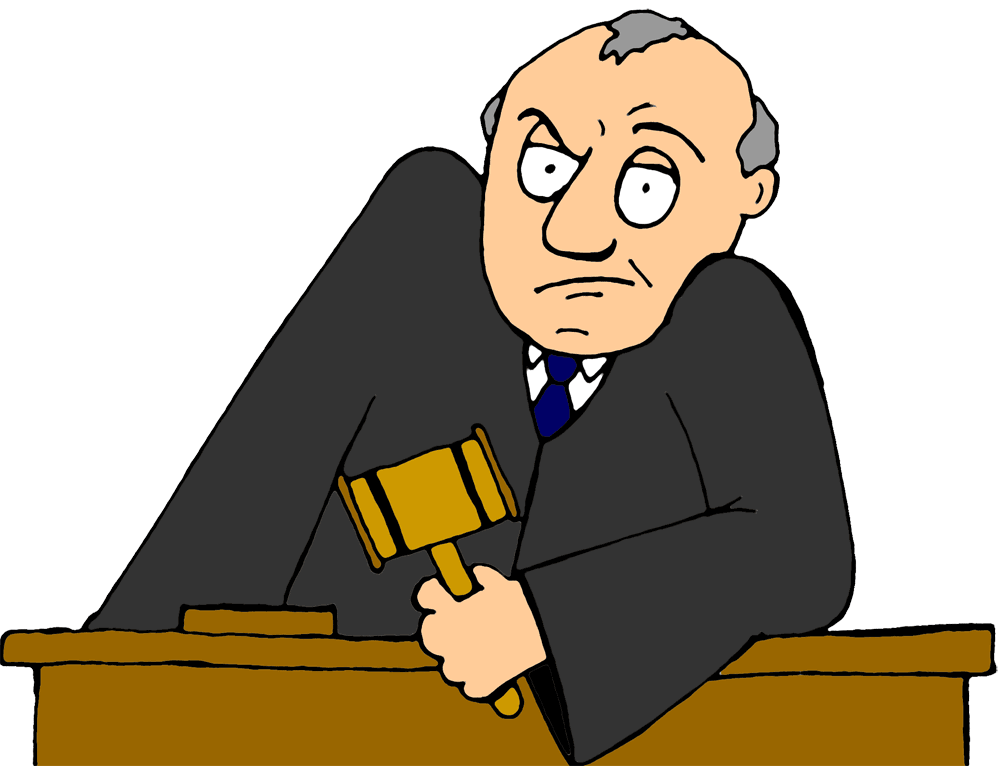
**K-5 Math Lesson Plan**

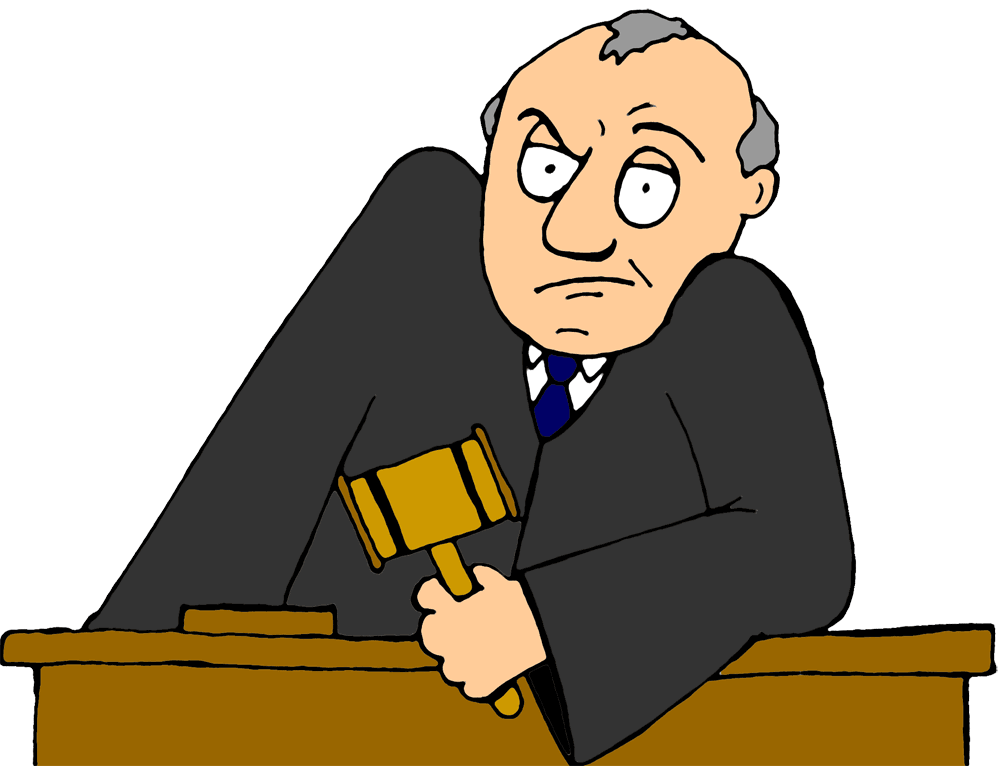
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| **Teacher: Beyrer** | | | **Grade: 5th** | | | **Date(s)**: Sept. 2012 |
| **Unit Title:** Unit 2 - Operations with Whole Numbers and Decimals | | | | **Corresponding Unit Task:** Food Distribution List, Teach prior to task 2 | | |
| **Essential Question(s):** How can I use division procedures to help me solve problems with large amounts? | | | | | | |
| **Materials/Resources** | | | | **Essential Vocabulary** | | |
| **Teacher:**  **Discovery video, Task cards,** | | **Student:**  Pencil, colored pencils, journals | | | Multiplication/multiply, division/divide, dividend, divisor, quotient, rectangular arrays, equations, area models | |
| **Learning Experience** | | | | | | |
| **8 Mathematical Practices:**  √ 1. Make sense of problems and persevere in solving them.  √ 2. Reason abstractly and quantitatively.  √ 3. Construct viable arguments and critique the reasoning of others.  √ 4. Model with mathematics.  √ 5. Use appropriate tools strategically.  √ 6. Attend to precision.  √ 7. Look for and make use of structure.  √ 8. Look for and express regularity in repeated reasoning. | **Common Core State Standards:** 5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area  models. | | | | | |
| **I Can Statement(s):** I can determine whole number quotients with up to four-digit dividends and one-digit divisors.  I can determine whole number quotients with up to four-digit dividends and two-digit divisors. | | | | | |
| **Activating Strategy/Hook:** (How will students become cognitively engaged and focused?)   * Discovery video. Long Division: Dividing Larger Numbers <http://player.discoveryeducation.com/index.cfm?guidAssetId=3244D801-80C5-4ECA-B2F2-E1C95D0C2B31&blnFromSearch=1&productcode=US> | | | | | |
| **Teacher Directed: Model**  Division with Divide/Multiply/Subtract/Check/Bring down using a different color for each steps (DMSCB) with 1583/16 | | | | | |
| **Guided Practice:** Play You Be The Judge. Teacher presents problems (attached below) on board, overhead or computer to the class. Students either individually or in groups have to decide whether the problem was done correctly (sustained) or incorrectly (object). The first student that sustains or objects must come up to the board to defend their decisions. | | | | | |
| **Independent Practice:** In their journals the students will answer task cards. Problems for the task cards are attached below. | | | | | |
| **Closing/Summarizing Strategy:** On the board the teacher will write out 2534/15 with all the division steps with asterisks replacing the 6 in the tens place of the quotient and the 9 and 0 of the 90 in as the multiplication answer within the steps of solving the problem. The ticket out the door will be to solve for the asterisks in their journals. | | | | | |
| **Differentiation Strategies** | | | | | | |
| **Extension** | | | **Intervention** | | | **Language Development** |
| * Students can use short-division method to solve problems accurately. * What If….   We wanted to combine another state such as South Carolina to our efforts? | | | * Teacher may limit the amount of items a student needs to complete to demonstrate proficiency. * Teacher can have the group divide by 10, 12, or other two-digit divisor. * Student may use calculator after each calculation to check for accuracy. * Teacher may designate only one grade level instead of all three grade levels for calculations. * Use an organizer to show steps for division as they work through the problems.   Work with a partner and talk through the process as they solve it. | | | * Build background for engaging scenario. * Students can partner read to increase comprehension. * The articles can be broken down into sections giving the students opportunity to write down or highlight key words to demonstrate understanding. * Explain how food that is donated is distributed to various organizations in Guilford County.   Use an organizer to show steps for division as they work through the problems. |
| **Assessment(s):** Review independent work in journals | | | | | | |
| **Teacher Reflection:** (Next steps?)   * What elements of the lesson worked, which elements did not * Which students have achieved mastery * Does any material need to be retaught | | | | | | |

Emily was collecting donations for the food bank. She collected an equal amount of food from each house. She collected a grand total of 3870 pieces of food. She collected food from 86 different people. How much food did she collect from each family?



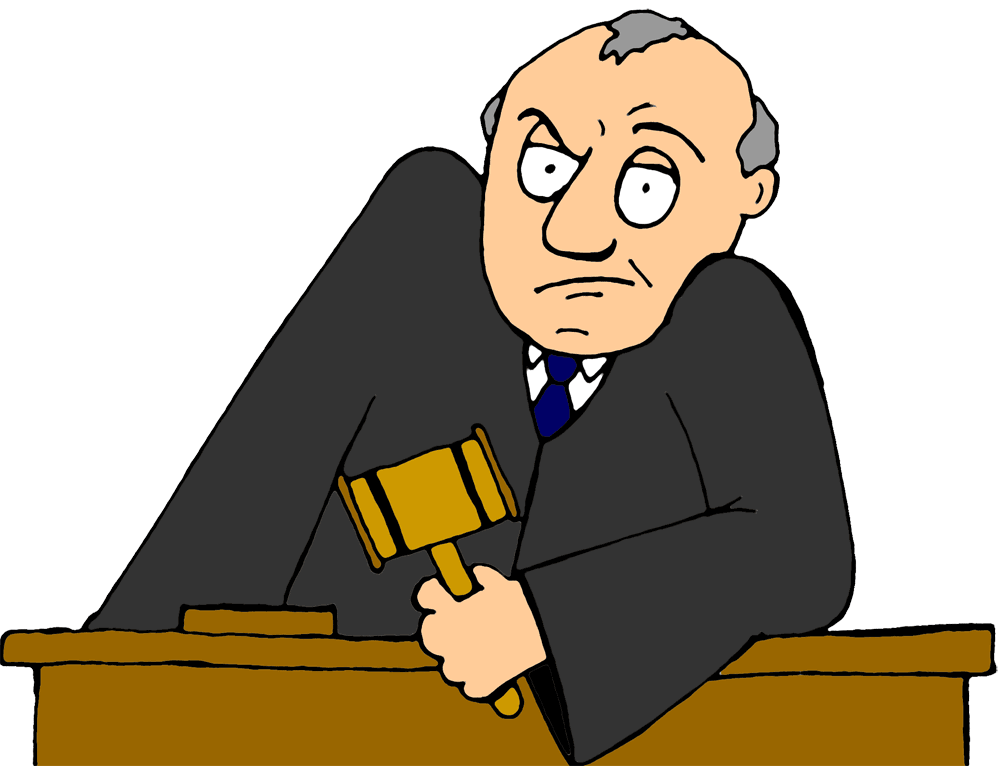
The Judge says 55

Emily has worked a total of 57 weeks over the last two years at the food bank. She has worked a total of 1368 hours. If she worked an equal amount each week, how many hours did she work each week?



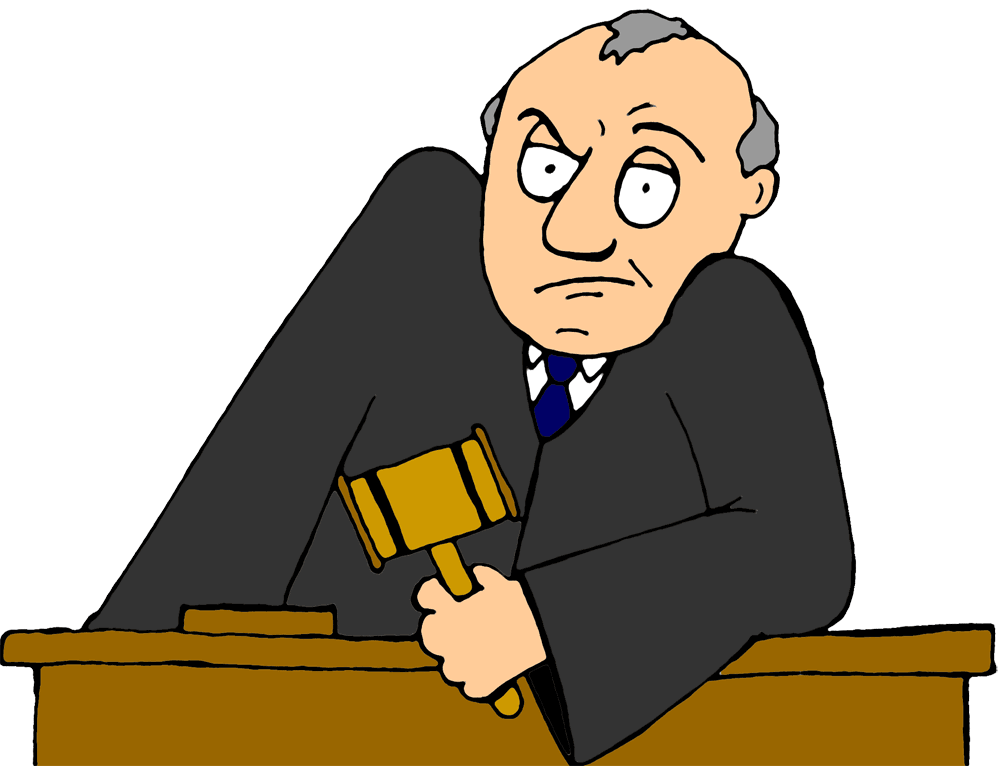
The Judge says23

After Emily returned to the food bank she was told that she needed to stack crates of canned food. Each crate contains 32 cans. Emily stacks a total of 4736 cans of food. How many crates did Emily stack?



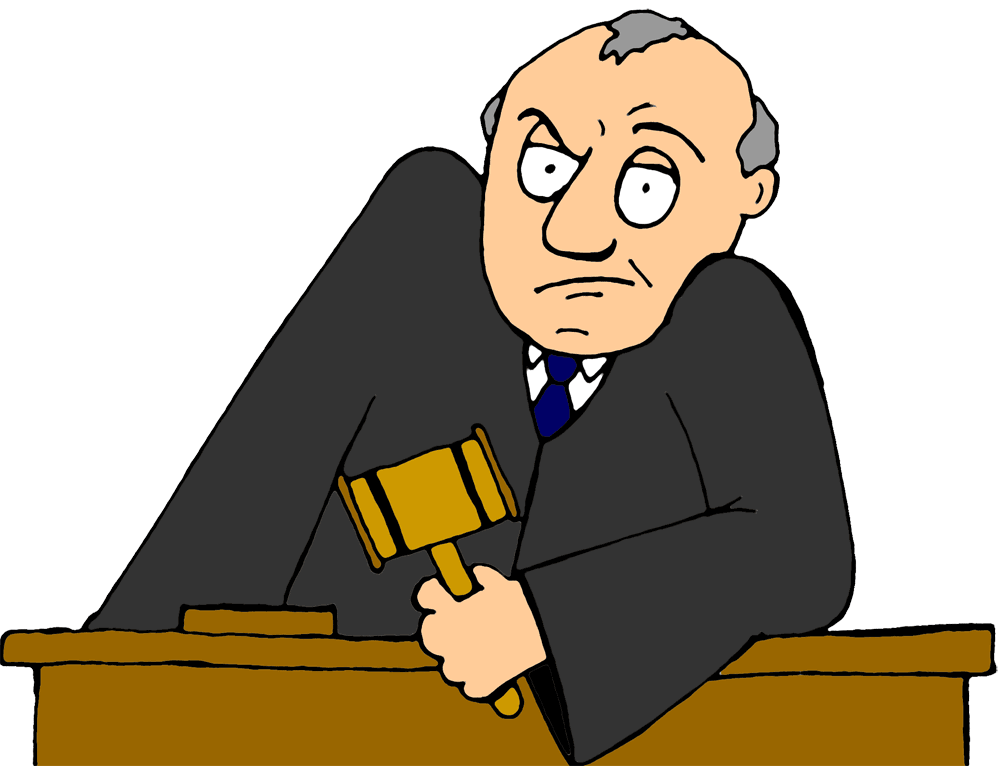
The Judge says 149

Emily and her entire class have worked a total of 8694 hours. If each student worked a total of 42 hours, how many students does she have in her class?

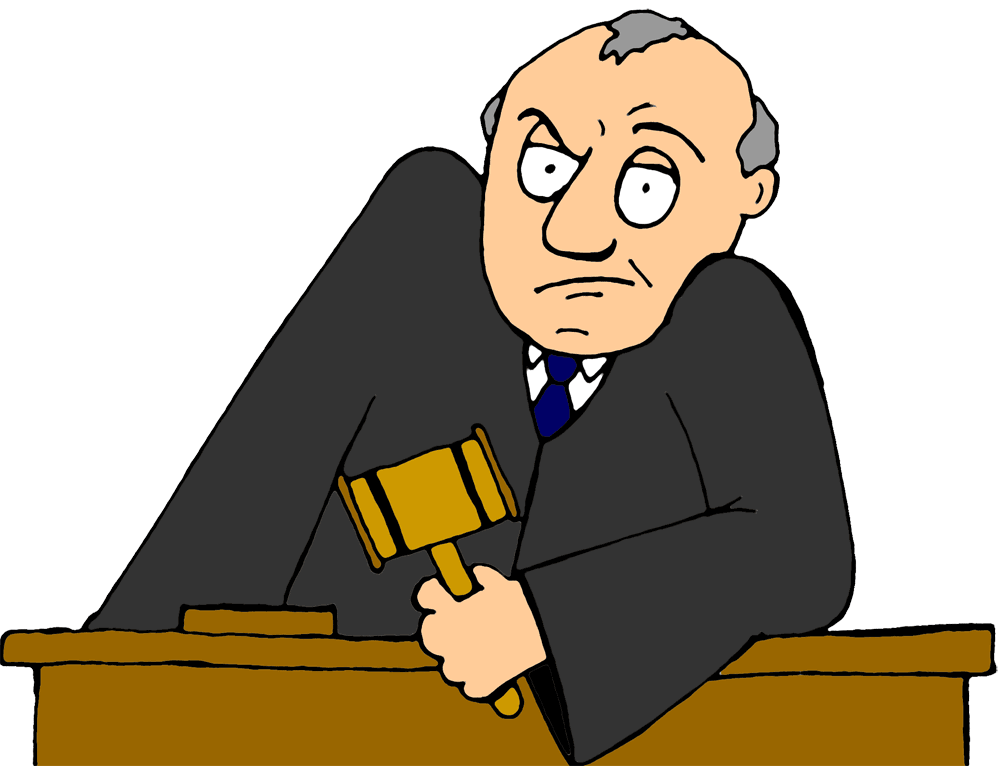


The Judge says 207

A total of 9834 packages of ramen noodles were delivered to the food bank. 45 packages fit into each box. How many complete boxes of ramen noodles did the food bank make?



The Judge says 218 R24

Emily has found a total of $2450 in the food bank budget. She wants to divide the money evenly between the 21 distribution sites. How much money does each distribution site receive if distributing in whole dollars? 

Task cards

Two digit divisor word problems

When completing these word problems include the remainder (if any) even if the answer does not require that level of specificity.

1. The Greensboro food bank has gotten a check for $9,856. They are supposed to use the money to pay their employees. How much money will each of the 15 employees receive in whole dollars?
2. Each cardboard box holds exactly twenty-four cans. On Tuesday the food bank received 4176 cans of food. How many boxes does the food bank need to store the food?
3. The food bank has 1500 boxes of macaroni and cheese. How many boxes of macaroni and cheese can each of the 81 families that the food bank serves received if they are divided fairly?
4. The food bank has the opportunity to distribute loaves of bread to some of the families in Greensboro. They have been given 1489 how many loaves can they give to 97 families.
5. A corporation has donated several $45 gift cards for Food Lion to the Food bank. If the Food bank gave away a total of $3690, how many gift cards were they given by the corporation?
6. There 37 different pallets of food are arriving at the food bank today. There will be 7770 packages of food. How many packages of food will be on each pallet?